

The Wobbly Oscillator



Hams Who Serve

Cuyahoga Amateur Radio Society

May 2022

Volume 52

Number 5



Hamvention – Here We Come!

From The Prez

**Matt Neeley, KB8UCH
To Speak at the May Meeting
On
Radio Reconnaissance in Ethical Hacking**

Matt Neely, KB8UCH, is a radio and security geek with over 20 years of experience in physical and cyber security. Matt combined these passions when he was a security consultant to use radios during security testing and ethical hacking. Ultimately this collimated in him co-authoring the book “Radio Reconnaissance in Penetration Testing.” Matt will share stories about using radios to assist in security testing for this month’s talk.

Hamvention Bus

There is still time to reserve a seat on the CARS bus to the Hamvention. Bus reservations and payments can be made on the CARS website (www.2cars.org), just follow the link on the home page. There is no reason to dilly dally about signing up for the bus, since seating is limited.

The luxury motor coach will leave Bagley and I-71 at 5:00 AM on May 21st, make a quick stop at Route 303 and I-71 at 5:30; then roll down to the Greene County Fairgrounds non-stop to arrive when the gates open. The bus will return in the early evening with the riders determining if a meal stop is in order. Although other clubs have raised their bus fare considerably, we have kept our price at \$50.00.

If you have never been to a Hamvention, make this the year to go. We are so fortunate to have the premier international ham radio event so close that it is a short bus ride away. Hams come from all over the world to attend the Hamvention spending great amounts on time and money to get there.

Make plans on joining us

Memorial Day Parade

Once again CARS has been asked to provide communications and support for the Seven Hills Memorial Day Parade. We have been doing this for years and we always have had good participation from our members. Besides that, we always have a good time. We will be meeting Monday morning at 9:00 AM at St. Columbkille church, 6740 Broadview Rd.

At the April meeting we decided to have a vehicle in the parade. Scott. AC8NW, graciously offered to let us use his pick-up truck as our ride. Besides adorning the truck with CARS banners and signs, Scott suggested we mount a Yagi antenna on the truck for visual panache. Excellent idea: that makes up for not having a vintage Caddy convertible. We also have the option of accompanying the truck with walkers, possibly wearing our hi-vis vests, ham radio related garb, and carrying HTs.

Anyone interested in helping with the parade, please contact me.

CARS Badges

We are in the process of ordering CARS identification badges you see so many of our members wearing at meetings and other events. If you would like a badge, please email me a picture of yourself you would like on the badge. Otherwise, I will be glad to take a picture of you at the May meeting. The badges are priced at \$10.00, which can be paid to our treasurer, Bob Check, W8GC, via check and sent to him at 7395 Brecksville Rd., Independence, OH, 44131, or in person at the May meeting. We do require payment in advance before ordering. We will order the badges in time for the Hamvention and Field Day.

73, Toby, WT8O

Next CARS Meeting

Tuesday, May 10 - 7:30 PM

Special Guest

Matt Neely, KB8UCH

Will speak about:

Radio Reconnaissance in Ethical Hacking

Busch Community Room

See Website for Details - www.2cars.org

**WELCOME NEW
MEMBERS**

**JOHN SCHWAB
KD8AB**

**RENEE VERHOFF
KE8UMN**

**JACOB TRASKA
KE8UMM**

MIKE PECORARO

CARS Meeting Minutes

April 2022

LOCATION---The meeting was held April 12th, at the Busch Funeral Home on Ridge Road in Parma, Ohio.

CALLED TO ORDER---The meeting was called to order by President Toby Kolman, WT8O, at 7:30 PM.

PLEDGE OF ALLEGIANCE---Those present pledged allegiance to the flag of the United States of America.

INTRODUCTIONS---Those present introduced themselves. 23 members and one guest attended the meeting.

MARCH MINUTES---The March minutes were approved as published in the WO.

NEW MEMBERS---Six new members were voted into the Club: Linda Fox, KM4GSF, Andrew Morkunas, N7JRR, John Schwab, KD8AB, Jacob Traska, KE8UMM, Renee Verhoff, KE8UMN and Mike Pecoraro, not yet licensed. Welcome to the new members!

TREASURER'S REPORT---Bob Check, W8GC, reported on the club's current financial situation. No issues or concerns were identified.

PRESIDENT'S REPORT---Toby Kolman, WT8O, reported that

- Those who are able to walk longer distances should park in the back lot of Busch. This will allow individuals who need to park closer to the room to do so.
- The Dayton Bus has been reserved. There are links on the Club website (<http://2cars.org>) with instructions for signing up for the bus and for buying tickets for Hamvention.
- There is a Skywarn training in Medina on May 11. Registration is required for the event. Additional details can be found at https://www.weather.gov/cle/SKYWARN_schedule.
- Please send stories and photos to Toby for the WO. Ideas for stories include recent vacations, new equipment, and shack updates.
- Matt, W8EBB, recently updated the Net check-in logs. Last week had only 10 check-ins, which is an all-time low. Please attend the Nets on Wednesdays at 9pm.
- Licensing classes are complete. Thanks to Ron, K8RJH, for teaching the Technician class and Joel, K8SHB, for teaching the Extra class. Toby taught the General class.



Mike Dobeck, K8CKC, gave a fantastic talk about the Secret Service sharing his experiences of 34 years with the agency.

Bob, K8RGI, welcomes new members and guests.



VICE PRESIDENT'S REPORT---Ron Hollas, K8RJH, reported

- FCC licensing fees begin on April 19, 2022. Additional details can be found at <http://www.arrl.org/news/view/new-amateur-radio-license-applications-fee-to-become-effective-april-19-2022>.
- Metro, W8MET, reminded the Club that a VE fee of \$15 will continue in addition to the new FCC licensing fees.
- The ARRL website (<http://www.arrl.org>) has been updated. Be sure to check it out!

SECRETARY'S REPORT---Matt Perlman, KE8OZU, had nothing to report.

PUBLIC SERVICE---Arp, K8ARP, reported that the next public service event is the Cleveland Marathon on May 21. Those not attending Hamvention should consider volunteering for the Marathon. Additional public service opportunities can be found on the N8ESG website (<https://n8esg.org/>).

VE UPDATE---Metro, W8MET, reported that the VE session on March 13 resulted in two new Technicians, one General and two Extras. The next CARS VE Session will be on Sunday, May 8, 2022 9:15am at the Old Rec Center in Independence.

FIELD DAY---Bob, K8RGI, reported that

- Field Day will take place on June 25-26 at Calvin Park in Seven Hills
- The Club has registered a 6A station with six transmitters
- Several Zoom meetings will be held to prepare for Field Day
- Sign-up for a Field Day T-shirt

PROGRAM COMMITTEE---Joe, KD8BAL, reported that

- Today's program is Mike Dobeck, K8CKC, to talk about the Secret Service
- May's program is to be announced
- Please send ideas for programs to Joe

TECH COMMITTEE---Scott, AC8NW, reported that the new remote input in Parma has been mostly completed by Vince, N8OVW. The remaining work is to setup the antenna and power, which will be completed by the people who service the location.

REFRESHMENTS---Toby, WT8O, thanked Ron, K8RJH, for providing soft drinks, Matt, KB8UCH, for providing doughnuts, and Shawn, KE8RMV, for providing coffee for in person meetings.

OLD BUSINESS---Toby, WT8O, reported that

- The Club needs a new net control station. The club recently lost two net control stations and currently has four. Anyone interested should let Toby, WT8O, know. Anyone unsure is encouraged to try before committing.
- The Club needs a backup secretary and treasurer. volunteers should contact Toby.
- The Club needs ideas for fundraisers. All legal ideas are welcome.



April's meeting had an excellent turnout.

NEW BUSINESS---Toby, WT8O, reported that

- The Club has been asked to help with the Seven Hills Memorial Day Parade. Volunteers will meet at St. Columbkille Church on Broadview Road at 9:00 AM on May 30, 2022. Please let Toby know if you would like to help.
- The Club has been offered a spot in the Seven Hills Memorial Day Parade. A car, banners and a sign are needed. Ron, K8RJH, suggested that the Club could possibly use Chuck's, K8CVM, converted ham van. Other ideas should be sent to Toby.

NEXT MEETING---The next meeting of The Cuyahoga Amateur Radio Society will be on May 10, 2022. The meeting is scheduled at the Busch Funeral Home on Ridge Road in Parma, Ohio.

50/50 DRAWING---Bob, W8GC, won the 50/50 drawing.

ADJOURNMENT---The meeting was adjourned at 8:04 PM.

After the meeting, Mike Dobeck, K8CKC, presented about his many years of experience with the Secret Service.

Submitted by Matt Perlman, KE8OZU, CARS Secretary

VE Session

The next VE testing session will be held Sunday, May 8th, at **9:15 AM*** at the Old Elmwood Recreation Center, 6200 Pete Wisniesky Parkway, Independence 44131. Directions and a map are on the CARS website homepage. For information or an appointment please contact Metro, W8MET, at 216-520-1320 or metro351@sbcglobal.net

As always, walk-ins are welcome.

***Please note time change to 9:15 AM.**

**EVERYBODY TALKS ABOUT THE
WEATHER, BUT NOBODY DOES
ANYTHING ABOUT IT.**

Mark Twain

CARS Repeaters

146.820 (-) PL Tone 110.9

Analog Repeater

Main Site – Brecksville

Receive Only Site – Brunswick

Receive Only Site – Shaker Hts.

Allstar Node 47067

EchoLink Node 343470 (K8ZFR-R)

443.825 (+) PL Tone 131.8

Digital Yaesu Fusion

Linked to 146.820 Repeater

Brecksville

444.75 (+) PL Tone 131.8

Analog Repeater

Not Linked to Other Repeaters

Shaker Hts.

NVIS Day 2022 - Testing an End Fed Design

Ron, K8RJH

Do you know if your station ready to establish and maintain high-reliability communication with other stations around Ohio when repeaters, phone, and internet service are impaired? This can be a real possibility that can happen anytime caused from natural or situational events

When infrastructure just isn't there, HF radio using Near-Vertical Incidence Skywave (NVIS) propagation offers the ability to stay in contact on frequencies of 2–30 MHz for distances of about 30–400 miles.

NVIS Day is the ARRL Ohio Section event to test NVIS antenna designs and builds. This year It was held on Saturday, April 23rd to show how well amateur radio can keep Ohio communicating. This is not a contest; it's an event for Ohio stations to operate with other Ohio stations and understand how well they hear and are heard.



The Cuyahoga ARES / N8ESG hosted their communications van for the NVIS Middleburg Heights site.



Steve, K8SAS, making contacts using the various antennas set up in the park lot. Observers and visitors throughout the day expressed interest in becoming licensed!



Charging the air cannon for installing a 135 Ft NVIS End-Fed antenna.

A NVIS station (hosted by the Cuyahoga County ARES – N8ESG) was set up for this year's event next to the Middleburg Heights Library in Middleburg Heights. This location offered a great open field with a few tall trees, which was perfect for testing HF antennas. I tried out a NVIS 160-10 Meter end fed design that had an aerial length of 135, a surface ground counterpoise of 55 feet, that could be erected and on the air in under 30 minutes.

Once this antenna was In-place, numerous contacts were made on the HF Bands between other Ohio NVIS stations that included Parks on the Air and Earth Day stations. It was interesting to experience the performance of the different antenna designs erected at the site on how each handled the NVIS pattern and resulting signal reports from contacted stations.

I was very pleased on my NVIS End-Fed setup, not only being quick to deploy but also measuring good VSWR performance with a ground level feed point. It demonstrated the use of a simple low-cost Ferrite Bead Balun that can provide an effective antenna match in field conditions.

If you have never participated in an NVIS day, I highly encourage it. This allows a great exchange of information on what Amateur Radio can do for the community and learn how you can improve your station for emergency events.

For additional information on NVIS antennas and designs, check out:

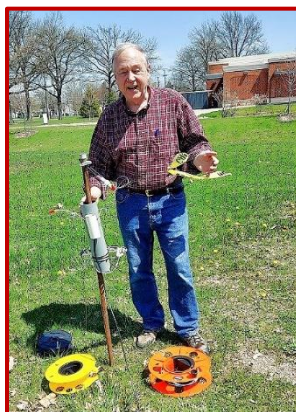
<http://hflink.com/antenna/>

https://k7mem.com/Ant_End_Fed.html

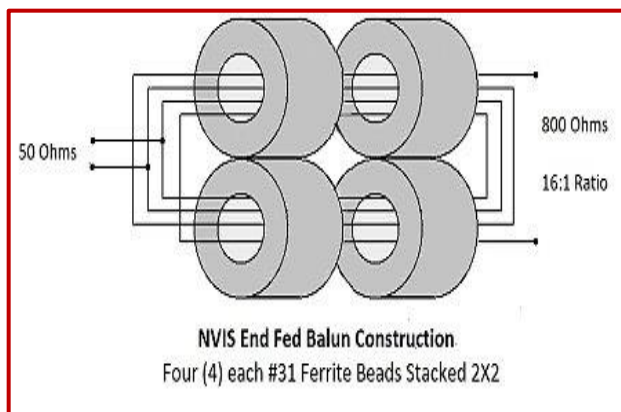
http://www.arrl-ohio.org/SEC/nvis_day.html



Top view of the Ferrite Bead mounting.



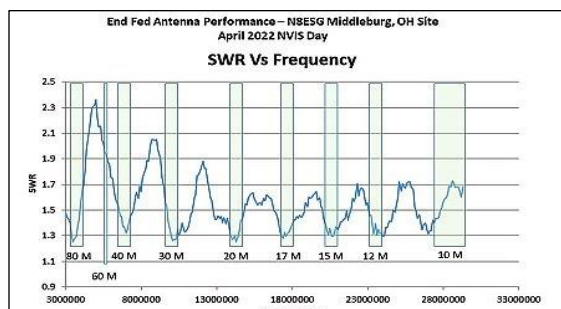
Ground Installation feed point of the NVIS End-Fed. The 135 Ft aerial wire slopes up to the right of the pipe assembly. A 55 Ft. ground wire rests on the grass that extends from the left of the pipe connection



Schematic and construction of the simple Ferrite Bead Balun used with the End-Fed antenna



The weather for NVIS Day 2022 was exceptional for communications.



Actual VSWR field measurement of the NVIS End Fed Antenna. Notice the low SWR readings at each of the popular HF amateur bands. (Taken with a SARK Mini60)



Ron, K8RJH, launching the End-Fed support line over a tree.

Important Message from ARRL VEC

April 27, 2022

FCC Not Processing Amateur Radio Applications

On Wednesday, April 27, in a notice to all VECs, the FCC again asked them to refrain from submitting any amateur radio exam session or license application files while the Commission works to resolve an issue with the Universal Licensing System (ULS) application filing system.

The ULS application filing system was not functioning properly last week and then the FCC indicated the problem was resolved, as previously reported by ARRL.

However, this was not the case, as no new amateur radio call signs and licenses have been issued since Monday, April 18, 2022.

Tuesday, April 19 is the day the FCC application fees became effective for amateur radio.

Amateur radio license filings are currently on hold until further notice and FCC did not estimate how long the system would be down.

View the entire news story on the ARRL website: <http://www.arrl.org/news/fcc-not-processing-new-license-applications>

[Submitted by Bob Check, W8GC, from ARRL notification.]

May Net Sked

MAY	4	KD8ACO
MAY	11	AC8NW
MAY	18	WT8O
MAY	25	K8RJH

**Nets are run every Wednesday at
9:00 PM on:**

146.820 (PL 110.9)

443.825(+) PL Tone 131.8

Digital Yaesu Fusion

Linked to the 146.82 Repeater

EchoLink Node 343470 (K8ZFR-R)

Allstar Node 47067



2022 Licensing Class

Toby, WT8O

The CARS licensing class this year was successful once again. Two Technicians passed their exams and became new Amateur radio operators. They were Renee Verhoff, KE8UMN, and Jacob Traska, KE8UMM. Upon passing, Renee and Jacob also received a free membership in CARS for 2022. We congratulate both and welcome them into the Amateur Radio Service and CARS. Two members of the class were unable to attend the VE session but are expected to attend the May testing session. We wish them success on the upcoming exam.

Anthony (A.J.) Kuches, KE8OMG, upgraded to General doing extremely well on his exam. A.J. is a CARS member and we look forward to seeing him and his father Dan at future club meetings and activities. Steve Kosick, KE8MAG, was another student in the General class who was unable to attend the VE session. We expect Steve to attend the May VE session and are confident he will do well.

Two students passed their Amateur Extra exams. John Dernar, KE8MAI, and Jim White, KE8NOH. Both did well on their exams.

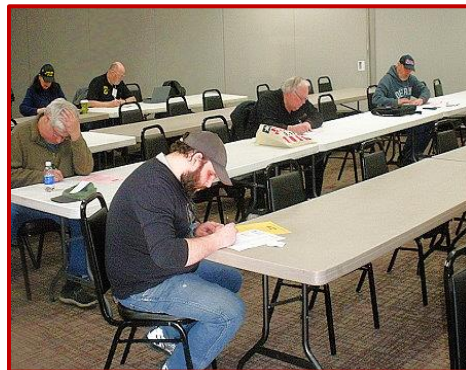
Special thanks to Metro, W8MET, for bringing his top-flight VE team to administer the exams. The VE team consisted of Gary, NI8Z; Linda, N8LRS; Joel, K8SHB; and Roger, N8TCP.

Thanks also to the instructors. Ron, K8RJH, filled in for David, KD8ACO, and did an outstanding job with the Technician class; Toby, WT8O, taught the General class; and Joel, K8SHB, brought his wealth of electronic and radio knowledge doing his usual splendid job teaching the difficult Amateur Extra class.

None of this would have been possible without the dedicated effort of the program director David Noeth, KD8ACO. David has for many years magnificently and completely organized the curriculum and created and distributed all the class materials, which included study guides, weekly practice tests, and reference material for each student and instructor. David's demanding business commitments prevented him from attending the classes this year, but his planning and contact with the team made the 2022 licensing classes another success. We couldn't have done it without you David and hope to see you back with us next year.



A.J. Kuches, KE8OMG, is nothing but smiles after passing his General.



It was all concentration during the exam.



The great VE team led by Metro, W8MET, with Gary, NI8Z; Joel, K8SHB; Linda, N8LRS, and Roger, N8TCP.

Skywarn Training

Many of us missed the Skywarn training recently held in Independence since we were attending the special VE session for the CARS licensing class. Fortunately, there will be another training session in our area Wednesday, May 11th in Medina at the Lafayette Fire Department, 6367 Technology Ln.

The training session will begin at 6:00 PM, and you must register in advance. All the information for registration is on the NOAA website https://www.weather.gov/cle/SKYWARN_schedule.

For those unfamiliar with Skywarn training, you can get a basic idea of the program on the NOAA website. By attending the training session one can learn much more about weather systems and become a certified spotter.

Joe Berngantt, NC8J SK *Toby, WT8O*

Honorary Members

Any person who by nature of
outstanding or meritorious contribution
to the furtherance of amateur radio and
the ideals of the Cuyahoga Amateur
Radio Society

Robert Check, W8GC

Elected 2/10/15

Thomas Wayne, WB8N

Elected 1/10/17

Dwayne Modock, K8ME, SK

Elected 5/9/17

Toby Kolman, WT8O

Elected 10/10/17

Jerry Smith, NW9H

Elected 5/8/18

Ron Borkey, K8VJG, SK

Elected 5/14/19

Ed Stevens, WB8ROK, SK

Elected 8/10/21

We lost a CARS member and a friend with Joe Berngantt, NC8J, becoming a Silent Key. We learned of Joe's demise right before press time, no details are available yet.

I got to know Joe really well riding next to him on the CARS bus to the Hamvention. After arriving, we stayed together walking the floor and checking out the exhibits. I was really impressed with Joe's knowledge, and as we moseyed out to the flea market it became even more apparent.

What impressed me further was the fact that Joe was an extremely polite and courteous fellow. He was an excellent companion for the event.

Joe turned into an a very active CARS member usually making the meetings, attending almost all club functions, and frequently checking in the weekly nets.

Joe went through some difficult personal times becoming scarce for a time. When things cleared up for him and he had the time to get with us again, we were all glad to see his smiling face.

If this latest solar cycle is all that some hope for, there may be an opening on 10 meters where we can hear Joe transmitting amid the clouds on a radio he cobbled together from parts.

Field Day 2022

Bob, K8RCJ

Field Day is less than two months away and plans are well underway. Three years ago, was our last in-person field day event at Calvin Park. It was well planned and executed, and everyone involved had a great time and brought away a lot of great memories. The last two years we have had people operating from home and then aggregating our scores to CARS. This year we have the best of both years. CARS will again be operating an in-person Field Day event at Calvin Park, just like three years ago, and we will also be aggregating scores from home stations, just like the last two years.

This year at Calvin Park we are planning to operate two SSB stations, one CW station, two Digital stations and a sixth station for traffic handling and alternate power placing us in the class 6A category. It will be a 24-hour operation requiring many volunteers for operating, setup, teardown, and everything in between. Bill Brown, W8BBB, will once again be providing home cooked meals for the entire event. I have never lost weight participating in a field day when Bill was cooking.

The ARRL has made the temporary changes for the last two years to allow home stations to aggregate their scores with a club station permanent this year. This means that anyone can operate a home station, submit their scores, and list Cuyahoga ARS as their affiliated club station. Scores will be listed separately by ARRL along with the aggregated score for the club. As was true last year each home station can individually accumulate bonus points such as receiving the W1AW Bulletin, which is good for 100 points, plus submitting their results electronically through the ARRL portal for an automatic 50 points.

Ron Hollas, K8RJH, will again host the N3FJP Club Score Processor software. Once setup, this will allow each home station operator to monitor their score in addition to the score of all other participating stations including the club station W8BM at Calvin Park. Ron has agreed to provide complete instructions and training as required. If you have any questions, please feel free to contact him directly.

I know at this point you are wondering what can I do to help? Besides signing up to help with setup and teardown, you can help operate individual stations. Stations normally have two operators at a time sharing the actual operating and logging responsibilities. These are great times to learn from more experienced operators. Remember, the best operating times, midnight Saturday to 8:00 AM Sunday go the fastest. There are also opportunities to setup a GOTA (Get On The Air) station or a VHF station. While these stations represent separate transmitters, they do not impact our 6A category classification. If you have any interest in either of these opportunities, please contact me or visit: <http://www.arrl.org/field-day-rules> for station requirements.

We also need some volunteers to act as “ambassadors”. These people will be available to welcome guests, explain what is going on and show them around the Field Day site. These people are required when we have the most visitors, Saturday afternoon until dark and Sunday midmorning till 2:00 PM. Let me know if you would be willing to fill one of these positions.





CARS member Kelly Dobeck, KD8TWX, brought Field Day to big time TV.



Field Day is all about ingenuity.



Field Day demonstrates amateur radio to the public.

Duane Lorens, KE8HXX, SK *Toby, WT8D*

Sadly, we must report Duane Lorens, KE8HXX, recently became a Silent Key. We knew Duane, his XYL, Lynn, and their son Michael for many years. The CARS association with the Lorens family goes back many years, I first met them at Field Day when I joined CARS in 2002.

Most of us know Mike from his attendance at club events including the summer picnic, Field Day, and the Christmas party. Mike listened to our nets almost every week on his scanner, and members would always say "Hi" to him. Although Mike's disabilities prevented him from becoming a licensed ham, Duane got his ticket over four years ago. He was able to check into the CARS nets giving Mike a chance to say "Hi" back.

We will certainly miss Duane and hope Lynn continues to bring Mike to some of our events and tunes the scanner to our Wednesday club nets.



Mark, KC8ESG, is repurposing Motorola 800mhz consoles into base stations by swapping out the transmitters with ones in the amateur radio bands. He's adding a lithium-ion phosphate battery with voltage meter and toggle switch, also an on off button for the ac power when needed. He is excited to see how well his idea performs.

The Wobbly Oscillator is a publication of the Cuyahoga Amateur Radio Society, P.O. Box 31264, Independence, Ohio, 44131-0264. Articles from this publication may be reprinted in any ham radio publication, provided that credit is given to this publication and the author, if known. All submissions should be emailed to: wt8o@att.net by the end of the month for publication in the next month's issue.

CARS 2022 Officers & Committees

Audit

K8RJH ** WT8O, WJ8WM

Audio/Video

AC8NW **

ARRL Liaison

K8RJH **

Awards

W8GC ** WT8O

Christmas party & Summer Picnic

WJ8WM **, K8ARP, KD8FTU, KD8FTV

Field Day

K8RGI **, WT8O, K8ARP, KD8SCV, AC8NW, AC8TN, WT8O, K8RJH, N8BBB food

50/50

KD8SCV

Hamvention Bus

KD8FTS **

License classes

KD8ACO **, WT8O, K8SHB

Media Representative

KD8SCV

Membership

WT8O ** W8GC

NET

WT8O **

Newsletter

WT8O ** 440-525-6109
wt8o@att.net

Programs at Meetings

KD8BAL ** KD8FTS, KE8OZU

Property Custodian's

KB8DTC records, W8GC equipment

Public Services

KD8FTS **, K8ARP

QSL Manager - W8HBI, W8BM

WB8N **

Refreshments at Meetings & Picnic

K8RJH ** pop, NW8X ** Donuts, KE8RMV *** Coffee

Scholarship

W8GC ** K8RGI, KE8OZU, WT8O, K8RJH

Sunshine (welfare)

Andy, KD8SCV ** 440-886-0723

Technical

AC8NW ** N8OVW, WJ8WM, KD8ACO, K8RJH, KB8DTC

VE Exams

Metro, W8MET ** 216-520-1320

Web Master/e-mail

W8GC **

** chairman or co-chairman

2022 Officers

PRESIDENT

Toby Kolman WT8O 440-525-6109
wt8o@att.net

VICE-PRESIDENT

Ron Hollas, K8RJH, 216-379-7440

SECRETARY

Matt Perlman, KE8OZU, 216-337-1540

Alternate Secretary:

TREASURER:

Bob Check W8GC 216-524-1750

Alternate Treasurer: Bob Robbins, K8RGI

Board Members & License Trustees

Board Chairman:

Mark Moro WJ8WM 216-661-0342

even year executive board 2 year term

AC8NW, KB8DTC, WJ8WM

odd year executive board 2 year term

K8RGI, K8ARP, KD8FTS

License trustee

K8ZFR

WT8O

License trustee

W8HBI, W8BM,

W8GC



February 5, 2022

